

REMARKS

In light of the above amendments and following remarks, reconsideration of the present application is requested. Claims 1, 3, 5-36, and 39-43 are pending in the application. Claims 1, 33, and 41 are amended. Claims 1, 33, and 41 are independent claims. Claims 2, 4, 37, 38, and 44-46 were previously cancelled.

Examiner Interview

Initially, the Applicants thank the Examiner for the interview conducted on September 3, 2009.

In the interview, the Applicant's representative and the Examiner discussed the arguments presented in the July 13, 2009 response with particular focus on whether or not the cited art (U.S. Patent No. 2,960,038, hereinafter "Lupfer") disclosed a "tube structure being movable between laterally expanded and collapsed conditions," as recited in claim 1. The Applicant's representative and the Examiner also discussed whether the cited art discloses "the pumping chamber being configured to receive pumped fluid to cause the tube structure to move towards the expanded condition and the pumping chamber thereby undergoing an intake stroke, the pumping chamber undergoing a discharge stroke upon collapsing of the tube structure in response to an action of actuating fluid in the actuating region," as recited in claim 1.

In short, the Examiner asserted two arguments: 1) that one skilled in the art could interpret a "lateral" direction recited in claim 1 as corresponding to an axial direction of Lupfer's bellows 48 (the alleged tube structure) as illustrated in FIG. 2 of Lupfer's disclosure; and 2) even if the lateral direction of claim 1 was properly interpreted as being transverse to the axis of Lupfer's bellows 48, claim 1 would still

be anticipated at least because Lupfer's bellows 48 are capable of moving in and out during an intake or an exhaust stroke.

During the interview, the Applicant's representative directed the Examiner to various figures which show that laterally expanded and collapsed conditions relate to a direction which is perpendicular to an axis of a tube structure. Therefore, the Applicant's representative argued that the Examiner's interpretation of the term "lateral" as corresponding to an axial direction of Lupfer's bellows 48 is inconsistent with the specification. The Examiner, however, argued that one skilled in the art, under "a broadest reasonable interpretation" standard, could interpret "lateral" as being in the axial direction of Lupfer's bellows 48. Accordingly, the Examiner maintained that his interpretation of Lupfer was without error.

With regard to the Examiner's second argument, the Examiner asserted that even if his interpretation of "lateral" was erroneous, that Lupfer still discloses the above cited features. In particular, the Examiner asserted that during an intake or exhaust stroke the walls of the bellows 48 may either move inwards or outwards. The Applicant's representative pressed the Examiner further on this point. During the interview, the Examiner could not ascertain whether the walls would move inwards or outwards during an intake or exhaust stroke, however, the Examiner maintained the because it was "capable" or moving either inwards or outwards, that the above features were properly disclosed.

In response, the Applicant's representative directed the Examiner to MPEP § 2112 (IV) which states that "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." Therefore, the Applicant's representative argued that merely asserting that Lupfer walls could move either in or out was not sufficient to prove the

above mentioned features were inherent in Lupfer's disclosure. The Examiner, however, argued that being "capable" of was sufficient to prove inherency.

Though not discussed in detail, the Examiner directed the Applicant's representative to the following references: U.S. Patent No. 1,514,875 (FIG. 1), U.S. Patent No. 4,240,812 (FIG. 2), U.S. Patent No. 5,223,010 (FIG. 4), and U.S. Patent No. 3,423,907 which are drawn to vacuum cleaner bags.

In short, the Examiner and the Applicant's representative did not agree as to whether Lupfer anticipated at least claim 1 of the application.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 3, 5, 6, 7, and 33-35 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,960,038 (hereinafter "Lupfer") as extrinsically evidenced by U.S. Patent No. 3,597,517 (hereinafter "Smith"). The Applicants respectfully traverse.

Lupfer discloses a bellows pump which includes a cylindrical hollow pump body 40 enclosing a bellows 48 (the alleged "tube structure" as recited in claim 1) and a compression spring 74. The cylindrical pump body 40 is attached to a base 41 which includes an air supplying conduit 62 to supply air into the bellows chamber 63 via passage 61. The bellows 48 is secured at one end by a nipple 44 (for example, by soldering) and at another end by a plug 49.

As explained in column 3, lines 50-56 of Lupfer's disclosure, Lupfer's bellows 48 expands due a force exerted on bellows 48 by the compression spring 74. At this time, the fluid being pumped enters the bellows 48 (see column 3, lines 50-56 of Lupfer's disclosure). Therefore, Lupfer discloses a structure (bellows 48) having an axial length that **lengthens** during an intake stroke. However, claim 1 recites a tube

structure wherein “an axial length of the tube structure **shortens** during the intake stroke.” Therefore Lupfer fails to disclose a pump having a tube structure which satisfies the limitations of claim 1. Accordingly, the Applicants submit Lupfer does not anticipate claim 1.

For at least the reasons given above, the Applicants respectfully request the rejection of claim 1, and all claims which depend thereon, under 35 U.S.C. § 102(b) as being anticipated by Lupfer be withdrawn.

For somewhat similar reasons, the Applicants respectfully request the rejection of claim 33, and all claims which depend thereon, under 35 U.S.C. § 102(b) as being anticipated by Lupfer be withdrawn.

Claim Rejections Under 35 U.S.C. § 103

Claims 8 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lupfer as extrinsically evidenced by Smith and in view of U.S. Patent No. 2,971,465 (hereinafter “Caillaud”). The Applicants respectfully traverse.

As argued above, the Applicants submit Lupfer fails to disclose, at least, a tube structure, wherein “an axial length of the tube structure **shortens** during the intake stroke,” as recited in claim 1. Caillaud does not disclose or suggest, nor does the Examiner rely on Caillaud for disclosing or suggesting a tube structure wherein “an axial length of the tube structure **shortens** during the intake stroke.” Accordingly, the Applicants submit the Examiner has failed to establish that claim 1 is *prima facie* obvious over the combination of Lupfer and Caillaud. Accordingly, the Applicants submit the Examiner has failed to show that claims 8 and 9, which depend from claim 1, are like wise obvious.

For at least the reasons given above, the Applicants respectfully request the rejection of claims 8 and 9 under 35 U.S.C. § 103 as being obvious over Lupfer as extrinsically evidence by Smith in view of Caillaud be withdrawn.

Claims 10, 11, 12, and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lupfer as extrinsically evidenced by Smith and in view of U.S. Patent No. 4,439,112 (hereinafter "Kitsnik"). The Applicants respectfully traverse.

As argued above, the Applicants submit Lupfer fails to disclose, at least, a tube structure, wherein "an axial length of the tube structure shortens during the intake stroke," as recited in claim 1. Kitsnik does not disclose or suggest, nor does the Examiner rely on Kitsnik for disclosing or suggesting, a tube structure, wherein "an axial length of the tube structure shortens during the intake stroke." Accordingly, the Applicants submit the Examiner has failed to establish that claim 1 is *prima facie* obvious over the combination of Lupfer and Kitsnik. Accordingly, the Applicants submit the Examiner has failed to show that claims 10, 11, 12, and 14, which depend from claim 1, are like wise obvious.

For at least the reasons given above, the Applicants respectfully request the rejection of claims 10, 11, 12, and 14 under 35 U.S.C. § 103 as being obvious over Lupfer as extrinsically evidence by Smith in view of Kitsnik be withdrawn.

Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Lupfer as extrinsically evidenced by Smith and in view of Kitsnik and in further view of U.S. Patent No. 3,427,987 (hereinafter "Eull"). The Applicants respectfully traverse.

As argued above, the Applicants submit Lupfer fails to disclose, at least, a tube structure, wherein "an axial length of the tube structure shortens during the intake

stroke,” as recited in claim 1. Neither Kitsnik nor Eull disclose or suggest, nor does the Examiner rely on either Kitsnik or Eull for disclosing or suggesting, a tube structure, wherein “an axial length of the tube structure shortens during the intake stroke.” Accordingly, the Applicants submit the Examiner has failed to establish that claim 1 is *prima facie* obvious over the combination of Lupfer, Kitsnik, and Eull. Accordingly, the Applicants submit the Examiner has failed to show that claim 13, which depends from claim 1, is like wise obvious.

For at least the reasons given above, the Applicants respectfully request the rejection of claim 13 under 35 U.S.C. § 103 as being obvious over Lupfer as extrinsically evidenced by Smith in view of Kitsnik and Eull be withdrawn.

Claims 15-20, 23-26, 28-32, 36, 39, and 41-43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lupfer as extrinsically evidenced by Smith and in view of Caillaud and in further view of U.S. Patent No. 3,250,226 (hereinafter “Voelker”). The Applicants respectfully traverse.

As argued above, the Applicants submit Lupfer fails to disclose, at least, a tube structure, wherein “an axial length of the tube structure shortens during the intake stroke,” as recited in claim 1. Neither Caillaud nor Voelker suggest or disclose, nor does the Examiner rely on either Caillaud or Voelker for suggesting or disclosing, a tube structure, wherein “an axial length of the tube structure shortens during the intake stroke.” Accordingly, the Applicants submit the Examiner has failed to establish that claim 1 is *prima facie* obvious over the combination of Lupfer, Caillaud and Voelker. Accordingly, the Applicants submit the Examiner has failed to show that claims 15-20, 23-26, 28-32, 36, and 39, which depend from claim 1, are like wise

obvious. For somewhat similar reasons, the Applicants submit claims 41-43 are likewise non-obvious over the combination of Lupfer, Smith, Caillaud, and Voelker.

For at least the reasons given above, the Applicants respectfully request the rejection of claims 15-20, 23-26, 28-32, 36, 39, and 41-43 under 35 U.S.C. § 103 as being obvious over Lupfer as extrinsically evidence by Smith in view of Caillaud and Voelker be withdrawn.

Claims 17, 21, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lupfer as extrinsically evidenced by Smith in view of Caillaud and in further view of Voelker and in further view of U.S. Patent No. 5,964,580 (hereinafter "Taga"). The Applicants respectfully traverse.

As argued above, the Applicants submit Lupfer fails to disclose, at least, a tube structure, wherein "an axial length of the tube structure shortens during the intake stroke," as recited in claim 1. Neither Caillaud nor Voelker nor Taga suggest or disclose, nor the Examiner assert that either Caillaud or Volker or Taga suggests or discloses, a tube structure, wherein "an axial length of the tube structure shortens during the intake stroke." Accordingly, the Applicants submit the Examiner has failed to establish that claim 1 is *prima facie* obvious over the combination of Lupfer, Caillaud, Voelker, and Taga. Accordingly, the Applicants submit the Examiner has failed to show that claims 17, 21, and 22, which depend from claim 1, are like wise obvious.

For at least the reasons given above, the Applicants respectfully request the rejection of claims 17, 21, and 22 under 35 U.S.C. § 103 as being obvious over by Lupfer as extrinsically evidence by Smith in view of Caillaud, Voelker, and Taga be withdrawn.

Claims 27 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lupfer as extrinsically evidenced by Smith in view of Caillaud and in further view of Voelker and in further view of U.S. Patent No. 2,027,104 (hereinafter "Kahr"). The Applicants respectfully traverse.

As argued above, the Applicants submit Lupfer fails to disclose, at least, a tube structure, wherein "an axial length of the tube structure shortens during the intake stroke," as recited in claim 1. Neither Caillaud nor Voelker nor Kahr suggest or disclose, nor does the Examiner rely on either Caillaud or Voelker or Kahr for suggesting or disclosing, a tube structure, wherein "an axial length of the tube structure shortens during the intake stroke." Accordingly, the Applicants submit the Examiner has failed to establish that claim 1 is *prima facie* obvious over the combination of Lupfer, Caillaud, Voelker, and Kahr. Accordingly, the Applicants submit the Examiner has failed to show that claims 27 and 40, which depend from claim 1, are like wise obvious.

For at least the reasons given above, the Applicants respectfully request the rejection of claims 27 and 40 under 35 U.S.C. § 103 as being obvious over by Lupfer as extrinsically evidence by Smith in view of Caillaud, Voelker, and Kahr be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1, 3, 5-36, and 39-43 in connection with the present application is earnestly solicited.

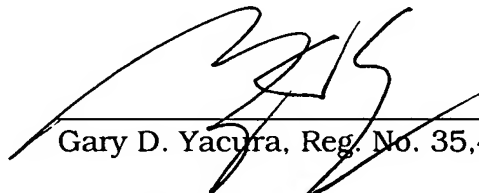
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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